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Articles:

NATURAL GAS:

Drilling boom creates conflicts with mortgages

Published: Thursday, October 20, 2011

Over the past 10 years, Americans have signed more than a million leases giving energy companies the right to drill for gas on their land. But now, as bankers and real estate executives take a closer look at the fine print, they are raising provocative questions.

What happens, for instance, if they lend money for a piece of land that ends up storing an Olympic-size swimming pool's worth of toxic wastewater from drilling?

Such worries have made banks, especially those in New York, reluctant to grant mortgages for properties leased for gas drilling. At least eight local or national banks do not typically issue such mortgages, according to lenders.

Bankers are also concerned because many gas leases allow drillers to operate in ways that violate rules in landowners' mortgages. According to these rules, homeowners are required to get permission from their mortgage banker before they sign a lease -- a fact that most landowners do not know.

Conflicts between leases and mortgage rules are unlikely to cause foreclosures, lenders say, and they have not resulted in broad litigation or legislation. But many of the leases do constitute "technical defaults" on mortgages, which could give lenders the right to demand immediate payment of the full loan or even foreclose on the property if the owner cannot pay, according to a report by the Congressional Research Service.

The situation is likely to result in new rules from local banks and additional hurdles for getting a home loan or refinancing a mortgage, lenders say.

"When you decide to sell your house you may find it difficult to do so because many banks, here and elsewhere, will not mortgage properties with gas leases, which, in turn, limits the number of buyers willing and able to buy your property, Linda Hirvonen, an agent in Ithaca, N.Y., wrote in a newsletter last month.

Banks set rules for how mortgage properties can be used in order to help ensure that they will hold their value. They also need to guarantee that their mortgages meet certain standards so they can sell them to institutions like Fannie Mae and Freddie Mac, which bundle the mortgages to sell to investors.

"In terms of litigation, there is a real potential for a domino effect here if lenders at each step of the way made guarantees that are invalid," said Greg May, vice president of residential mortgage lending at Tompkins Trust Co.

The banking industry is only beginning to appreciate the complexity and possible consequences of the natural gas boom, bankers and mortgage experts said.

"It's truly a Pandora's box," Cosimo Manzo, a vice president at First Heritage Financial, a mortgage services company in Philadelphia, said during a presentation to Pennsylvania lenders. He compared getting leases to comply with mortgage rules to solving a Rubik's cube.

Drilling officials, however, offer a different view. They say that income from lease bonuses and gas royalties enhance property value and that mortgage lenders welcome gas drilling because it gives borrowers extra income that can be used to pay off mortgages.

Lawmakers are starting to ask more questions about the interplay between leases and mortgages. Last month, Reps. Edward Markey (D-Mass.) and Maurice Hinchey (D-N.Y.) asked Fannie Mae and Freddie Mac how they intended to rectify any breaches of their standards caused by drilling leases. State legislators from New York, Ohio and Maryland have also sent letters to regulators asking for more information (Ian Urbina, *New York Times*, Oct. 19). **-- AS**

http://www.eenews.net/Greenwire/2011/10/20/15

OIL AND GAS:

Pa. to decide whether Cabot has rectified Dimock pollution

Published: Tuesday, October 18, 2011

The quest for clean water in Dimock, Pa., may be reaching a critical point.

Cabot Oil & Gas Corp., whose drilling work in the area has been shuttered until it cleans up the methane gas that its drilling operations have caused to seep into Dimock's aquifer, said it has met the Oct. 17 deadline to restore and replace the town's water supply by providing treatment systems and massive containers known as water buffalos on affected properties.

But residents who have filed a lawsuit against the natural gas company disagree. They say their water is still unusable due to contamination from methane and toxic chemicals commonly associated with hydraulic fracturing, a process Cabot and other drillers use to extract gas from shale formations.

"I want to live in this home, but I have to have drinking water," said Victoria Switzer, whose water was found to be contaminated with toluene and ethylene glycol. "I have to have water that doesn't freak me out with wondering what's in it today."

Cabot said Switzer's water had been contaminated by a nearby auto repair shop, not by the company's operations. Switzer said she does not believe Cabot.

The Pennsylvania Department of Environmental Protection will make the final determination whether Cabot has fulfilled its obligations to Dimock, a town made famous by the Oscar-nominated documentary "Gasland," which showed the effect of natural gas drilling on nearby residents.

If DEP finds Cabot's work is complete, the company will be permitted to resume drilling in the town and will stop paying for water deliveries to residents.

DEP spokeswoman Katherine Gresh said the department does not have a deadline for its decision.

"DEP will continue to require Cabot to do this work until we are satisfied that the methane migration problem has ceased, regardless of how long it takes," she said via email.

Cabot has been drilling in Dimock since late 2008 after homeowners in the area leased their land to the company. On Jan. 1, 2009, a residential water well exploded, leading to a DEP investigation that revealed methane had migrated from Cabot's wells into the water supply. Cabot denied the findings, saying the methane in the residents' wells was naturally occurring (Michael Rubinkam, *Fuel Fix*, Oct. 17). **-- PK**

http://www.eenews.net/Greenwire/2011/10/18/7

OIL AND GAS:

N.D. booms while southern neighbor remains 'underexplored'

Published: Monday, October 17, 2011

Thanks to hydraulic fracturing and a rise in oil prices, North Dakota will likely overtake California, and possible even Alaska, to become one of the country's top three oil-producing states next year. The state has already rapidly sprung onto the oil scene, rising from the ninth-largest producer to No. 4 between 2006 and 2009.

In August, North Dakota produced about 444,000 barrels of oil a day with its 5,951 wells. There are plans for up to 2,000 new wells to be drilled next year, on top of 200 wells already being drilled.

Meanwhile, oil production in California and Alaska has slowed. California produces about 539,000 barrels of oil a day, while Alaska produces 550,000.

"No data I've seen shows California's production increasing, so they do have a target on their neck," said Steve Grape, the domestic reserves project manager for the U.S. Department of Energy's information administration. "And Alaska's production is declining faster than California's" (James MacPherson, AP/*Anchorage Daily News*, Oct. 15).

Sixty years ago, there was not a single well in either of the Dakotas. In 1951, the first well was drilled in North Dakota, and since then most attention has been focused on the north, home to the Bakken Shale formation.

"Everybody was pouring their money into North Dakota. It was a sequence of events that left South Dakota in the dark," said geologist Tony Petres, managing partner for the Inyan Kara Group in Rapid City, S.D.

Before the advent of hydraulic fracturing, oil in South Dakota was thought to be too heavy to be drilled. Attempts have been made throughout the decades to tap the state's oil, but today South Dakota's reserves remain "underexplored."

Experts say they believe there are many formations like North Dakota's Bakken contained in the state and that oil is just waiting for someone to come make an investment.

"We have a geologically enticing area that needs to be explored," said South Dakota School and Public Lands Commissioner Jarrod Johnson. "We have oil in South Dakota, without a doubt. We are underexplored. It's just a matter of getting the seismic information" (Denise Ross, Mitchell [S.D] *Daily Republic*, Oct. 17). **-- AP**

http://www.eenews.net/Greenwire/2011/10/17/10

OIL AND GAS:

API 'reaching out' to state regulators on fracking standards

Mike Soraghan, E&E reporter

Published: Thursday, October 13, 2011

The American Petroleum Institute has been training state oil and gas regulators in drilling-heavy Eastern states to make sure its standards are well-known and understood.

The trade association has briefed regulators in Pennsylvania and West Virginia about its standards on hydraulic fracturing, a process essential to prying gas from deep rock formations in those states. But it has also raised questions about water pollution and other problems.

"We're reaching out to the regulators," API Executive Vice President Marty Durbin said. "In Pennsylvania and West Virginia we were asked to return and provide additional training."

The training sessions come as the industry tries to buff its image and address concerns that oil and gas interests usually dismiss as false fears spread by environmental groups opposed to fossil fuel production. API kicked off that effort last week at a workshop in Pittsburgh called "Commitment to Excellence in Hydraulic Fracturing" (*Greenwire*, Oct. 16).

A panel commissioned by the Obama administration recently criticized the industry's response to such concerns and said that "absent effective control," political pressure could jeopardize oil and gas production. But API says that group, an advisory panel to Energy Secretary Steven Chu, overlooked effective regulation by the states (*Greenwire*, Aug. 17).

"They are doing an effective, credible job," Durbin said. But API officials conceded that the industry has a perception problem in many of the communities where it has recently started to drill.

The training sessions with state regulators have focused on five API standards related to hydraulic fracturing and drilling practices.

API is also developing recommendations for drillers on how to introduce themselves to the communities where they are going to operate. Currently, the industry has an addendum to standard that addresses "good neighbor" practices. But those recommendations, developed out of discussions between ranchers and drillers in New Mexico's San Juan Basin, address company-to-landowner dealings rather than company-to-community relationships.

Beyond the Pittsburgh conference, industry officials have voiced a cautious acceptance of the need for U.S. EPA's new air rules governing oil and gas production. And they fell in behind Pennsylvania Gov. Tom Corbett's call for impact fees on drilling and new rules. Environmentalists have criticized the Republican's proposals as weak.

http://www.eenews.net/Greenwire/2011/10/13/4

NATURAL GAS:

Pa. residents support fracking -- poll

Published: Tuesday, October 11, 2011

More Pennsylvania residents support the use of hydraulic fracturing to extract natural gas from the Marcellus Shale than not, according to a poll by Mercyhurst College. The poll backs up other surveys with similar findings.

However, residents said they were against drilling in state forests and parks.

The survey was based on 426 residents, and it had a margin of error of 4.75 percent.

About 70 percent of those surveyed said they were familiar with how fracking works. Of those, 55 percent said they were in favor of fracking, while 27 percent were opposed. About 9 percent said "it depends" (Laura Olson, *Pittsburgh Post-Gazette*, Oct. 11). **– GV.**

http://www.eenews.net/Greenwire/2011/10/11/20

NATIONS:

China begins to tap its shale gas, despite daunting technological, environmental hurdles

Joel Kirkland, E&E reporter

Published: Friday, October 14, 2011

CHENGDU, China -- A convoy of white vans barreled down a dusty road three hours south of this provincial capital in late September. Lush valleys were drying out after another long and turbulent rainy season.

U.S. and Chinese government officials and brass from the nations' biggest oil and gas companies tailed their police escort deeper into Sichuan province. Truck traffic clogged the road, bisecting vegetable patches and rice paddies that seemed to disappear into the fog that morning. Around a final bend, the sunburst insignia on PetroChina's flag soared above the first horizontal natural gas well drilled in a Chinese shale basin.

The troupe of official visitors, dressed in red lab coats and hard hats, listened as a young PetroChina spokeswoman read from a sprawling billboard, in Chinese, then English: "Sichuan Basin, one of the earliest regions to discover and use natural gas in human history, is now becoming a hot spot for shale gas development," she boasted.

Shale gas is among the largest onshore energy prospects in China, and it is treated as such in Beijing and by local officials in central China and its sprawling Northwest. Unlocking trillions of cubic feet of gas buried in underground formations means heating more city apartments, generating more electricity from a resource other than coal, and feeding industrial plants hungry for energy.

But the government's quest to develop China's large shale gas deposits is in its earliest days. National oil companies and Beijing are moving cautiously. China is well aware of the environmental pitfalls that are raising doubts in the United States. There are geological differences that make the U.S. shale boom difficult to duplicate in China. Water for extracting gas is relatively abundant in Sichuan, but farmers in the nation's breadbasket need it more. Sichuan farms supply 7 percent of China's rice, wheat and other grains.

Tapping the homegrown shale, as China sees it, could buffer the economy from supply shocks if Russia or its gas-rich neighbors bordering the Caspian Sea restrict pipeline access. And, as it proved out in the

United States, shale gas can be a formidable competitor for high-priced liquefied natural gas shipments sloshing around on the open seas.

Seeking an escape from foreign oil with U.S. help

"If the strategic goal is energy security and you're now 55 percent dependent on foreign crude, that undermines the goal of domestic energy security," said Damien Ma, a China analyst at Eurasia Group. "A lot of companies want to do more gas."

China's state-owned energy companies are captivated by the prospect of an onshore gas bonanza where there had never been one before, and they're not alone.

U.S.-based oil and gas giants Exxon Mobil Corp., Chevron Corp., ConocoPhillips, Anadarko Petroleum Co. and Halliburton Co. -- with the help of the U.S. government -- are delicately urging regulators in China to loosen restrictions on foreign gas field operators. The multinationals, confident that their expertise in cracking shale basins is worth something to China, are approaching with varying degrees of success the largest state-owned producers with offers to partner on projects.

So far, Royal Dutch Shell PLC is the only major Western producer to sign a broad partnership agreement to help PetroChina build wells. Offering few details, Exxon has said it is partnering with Sinopec to explore in the Sichuan Basin. BP PLC and Statoil are reportedly also in joint venture talks.

"It's way too early to really judge what the potential is and what's going to happen here in China. It's in its infancy," said Mark Pospisil, senior vice president of geology for XTO Energy Inc., speaking at an energy conference in Chengdu. XTO and Exxon merged in June 2010 to create the world's biggest shale gas producer.

"It's like George Mitchell drilling the first well in the Barnett [Texas shale deposit] in 1984 and trying to frack it," Pospisil said of China.

Two decades before Exxon's $30 billion bet placed shale gas squarely on the world map, Mitchell's Texas oil company pioneered horizontal drilling and hydraulic fracturing, a resource-intensive industrial process that drillers and their environmental critics shorten to "fracking."

Learning 'fracking' on the run

Producers inject millions of gallons of water, sand and chemicals at a high pressure into wells drilled some 8,000 to 10,000 feet deep and close to a mile in one direction. It fractures and "stimulates" the porous shale rock, tight gas or coal-bed methane deposits, coaxing gas to the surface.

It took Mitchell 20 years to cajole enough gas from the Barnett Shale field underneath eastern Texas to make it a big business. China wants to do the same thing in the giant 81,000-square-mile Sichuan Basin, only faster.

China's capacity to build energy infrastructure by injecting financial and regulatory support means that China could carve hundreds, if not thousands, of wells out of Sichuan's fertile countryside by 2020. In the next four years, PetroChina says it plans to build 220 gas wells in the same area as it built its first.

If China opens the spigot for shale gas developers, there are significant deposits in Inner Mongolia in the north and particularly in China's restive Western frontier, Xinjiang, which suffers from severe droughts, water shortages and a separatist movement.

A report last spring, commissioned by the U.S. Energy Information Administration (EIA), estimated that China holds 1,275 trillion cubic feet (tcf) of technically recoverable shale gas reserves, compared to 860 tcf of shale gas in the United States.

But drilling thousands of wells -- as wildcatters, small independent producers and oil giants did across Texas, Arkansas, Louisiana and Pennsylvania in the past decade -- will be a lot harder in China, sources emphasized during interviews with *ClimateWire* conducted in the United States and China.

"A year ago, we were saying that we expected the buildup of shale to be conservative and incremental," said Gavin Thompson, director of China gas research at Wood Mackenzie in Beijing. "Twelve months later, we haven't seen much progress."

Secretive environmental data

Exploration, seismic and environmental data out of China's shale fields are murky, either because the right information isn't being collected by regulators or because it's buried in closely held exploration and drilling reports. It's an industrywide concern underscored in the EIA report, drafted by Advanced Resources International (ARI), an Arlington, Va.-based research firm. "Reservoir quality remains uncertain, while in-country shale drilling and completion services are still nascent," the report says.

Analysts there predict it will take five to 10 years for production to reach "material levels," but include significant caveats to suggestions by PetroChina, Shell and others that a shale boom is on the horizon.

"We would give it a much bigger haircut because of the geological complexity," said Scott Stevens, a co-author of the ARI report who has worked on gas projects in China for 20 years.

At times, there is more than meets the eye. At a visit to the PetroChina site in Weiyuan, the site south of Chengdu in south-central China, a drilling pipe in the middle of a soaring rig spun slowly as officials observed what appeared to be an active drilling operation. Yet a progress report, viewed by a Halliburton employee days earlier, indicated engineers had been forced to stop operating after the drill head broke off a mile underground.

Shale gas in China could trump imported LNG or gas piped from Turkmenistan on price, said Western energy analysts, but not until China gets better at drilling wells, or hires outside help. It took PetroChina 11 months to complete its first horizontal well last spring. "That's time and money," Stevens said.

"It looks so easy in the U.S., but we have independents," he added, referring to the band of small and mid-sized U.S. producers that were nimble enough to spend a decade developing the shale fields through trial and error.

"We also have private mineral rights. You've got thousands of farmers in Pennsylvania who are getting royalties," Stevens noted. "Overseas, including in China, the government owns the mineral rights. It takes years to get contracts; they're not giving contracts to foreigners."

During the 1990s, Exxon, Chevron, Texaco and Phillips all but abandoned exploration projects in the oil and gas-rich Tarim Basin after China steered the best opportunities to its state-owned companies.

Haibing Ma, a China energy expert at Worldwatch Institute, said China is cracking open the door to more collaboration, however slowly.

In Chengdu last month, officials from China's Ministry of Land and Resources and National Energy Administration said the government might set up a regulatory system that treats shale gas differently from conventional oil and gas.

Legal access for outsiders remains unclear

For now, licenses to explore shale gas blocks are for domestic companies only. Last week, the government said a second auction will be held before the end of the year. The ease with which PetroChina, Sinopec or smaller explorers can bring on a foreign partner is still unclear.

"This is something we need to sort out," said Che Changbo, deputy director of oil and gas strategy at the Ministry of Land and Resources.

China demands more energy and produces more greenhouse gas emissions than any other nation. It remains tethered to coal for 70 percent of its electricity and imports oil to fuel its growing car fleet. Natural gas accounts for about 4 percent of China's energy use today, but, as it stands now, China plans to boost that to 10 percent by the end of the decade.

In the United States, the expansion of the onshore gas resource by advancing drilling technology and bringing to bear huge capital injections into the shale basins has helped accelerate the closure of coal-fired power plants.

While burning gas for power slashes smog-forming and cancer-causing pollutants and cuts carbon emissions in half, observers say China is not about to sideline its existing fleet of coal plants. China has built much of its fleet of modern coal-burning plants in the past five years.

Asia's powerhouse is slowing, as inflation, signs of trouble in China's massive housing stock, and the sustained economic downturn in the United States and Europe pinch. But its economy still expanded at a rate of 9.5 percent in the second quarter.

China is pursuing every resource it can to keep the economy humming. In the case of shale gas, it's about where the United States was in 2001: LNG terminals and international pipelines are being built, until there's greater certainty about shale gas.

"To meet the demand growth, China has a fairly limited number of options," said Thompson of Wood Mackenzie. "Either it continues to attract imported gas, alongside the development of domestic resources, or it sees demand growth flatten by the end of the decade."

Despite half a decade of negotiating and political tension, some analysts say China and Russia's Gazprom will eventually cut a long-term supply deal. But until then, and until shale gas becomes a reality, analysts expect China's national oil companies will import more LNG and negotiate contracts with gas suppliers in Qatar, Australia and Papua New Guinea.

The government has put off gas price reform as it tries to curb inflation. So in August, China offered its gas importers a rebate to narrow the gap between what they spend to buy LNG and what they sell gas for in the domestic market.

The rebate is meant to prod Sinopec, China National Petroleum Corp., which operates PetroChina, and China National Offshore Oil Corp. (CNOOC) to compete for LNG tankers during energy shortages and gain better access to an Asia-Pacific gas market dominated by demand in Japan and South Korea.

Jobs, food and water issues among 100M neighbors

Sichuan Basin, where PetroChina fracked its first well, is among the most heavily populated regions in the country. Nearly 100 million people live in Sichuan province and its neighboring megacity, Chongqing. The

basin stretches into southern Yunnan and eastern Hubei provinces, and the Yangtze River drains into tributaries through the region, nourishing the land.

Industrial development is rapidly encroaching on the countryside where PetroChina is exploring for gas. Bringing factories, steel mills and decent-paying service jobs to areas closer to home for millions of migrant workers is part of China's "economic rebalancing."

As the convoy of American and Chinese oil industry officials pressed ahead along crowded two-lane roads last month, smoke belched from a steel plant cut into the leafy hills. An unfinished bridge stretched across a valley. A makeshift coal mine appeared, and a few miles up, a truck hauling a full bed of dirt had run off the road, tipping toward a ravine.

Farms are tucked ever more tightly into the landscape. China's staples are produced here -- one-tenth of its pork, and the grains and oils needed to feed 1.3 billion people. Water is abundant, but unevenly distributed across the region.

"Just pick up China's five-year plan and there are water issues all over it," said Guy Lewis, a managing director at the Gas Technology Institute, based outside of Chicago. "The way it plays out in China might be based on their choices of technology."

PetroChina plans to build at least 200 wells in this corner of the basin by 2015. It will create jobs. It will also squeeze the landscape and the people living there.

Few roads and pipelines are built to haul massive amounts of water, sand and drilling sludge in and out. Few rules exist for disposal of wastewater or use of local streams. To drill in this area's urbanizing countryside, alongside working farms, multiple wells will have to be built on a single drilling pad, according to industry sources, and water recycling will have to be the norm.

Ming Sung, the Beijing-based chief Asia-Pacific representative for the Clean Air Task Force, said in an interview that prime agricultural land and shale gas development can coexist.

"We have sufficient technology to ensure they coexist, but they have to do it right," said Sung, a chemical engineer who worked for Shell for 25 years.

Daily News

EPA Faces Likely Industry Challenge To Fracking Guide's 'Diesel' Definition

Posted: October 17, 2011

Industry is vowing to challenge a seemingly broad definition of “diesel” EPA appears to be using in its draft guidance on permitting hydraulic fracturing operations under the drinking water law, saying the definition is unlawful because it targets chemicals beyond “diesel fuels” and oversteps the agency's Safe Drinking Water Act (SDWA) powers.

“We think the law says [EPA has the power to regulate] 'diesel fuels',” not the more general term, “diesel,” one industry attorney says.

Ann Codrington, acting director of the agency's Drinking Water Protection Division, told groundwater regulators in Atlanta late last month that the agency was planning to use a broad definition of “diesel fuels” to determine what fracking operations must obtain SDWA permits.

She said the agency was likely to use a definition that “takes into consideration the physical and chemical characteristics" of diesel fuels, an approach that environmentalists and other proponents say will likely force regulation of harmful constituents of the fuel with similar characteristics, such as benzene, toluene, ethylbenzene and xylene (BTEX) compounds.

EPA is slated to submit a draft version of the guidance to the White House Office of Management & Budget (OMB) for review in the coming weeks. Agency staff also briefed EPA Deputy Administrator Robert Perciasepe about the draft guidance Oct. 14, according to Perciasepe's schedule.

Industry is already raising potential challenges to EPA's approach, however, saying it targets the broader class of BTEX compounds, as well as other substances that are useful in fracking and share similar characteristics with diesel but are not considered “diesel fuels.”

Industry groups have generally favored a narrower definition of the term “diesel fuels,” that relies on chemical abstract service (CAS) numbers to identify the substance.

Industry sources say that the guidance is likely to be met with a legal challenge to force the agency to set the permitting requirements through formal rulemaking, and that the broad definition could become a target for a lawsuit because it oversteps EPA's SDWA authority by attempting to regulate substances other than diesel fuels.

“It certainly has ramifications for the whole [guidance] issue,” the industry attorney says.

Congress in the Energy Policy Act of 2005 barred EPA from regulating fracking injections under SDWA's underground injection control permitting program, but added the clause “except for diesel fuels” to the statute, preserving the agency's authority to subject just those operations that use diesel fuels to permitting.

EPA in 2010 posted language to its website indicating that permits were required for fracking operations that use diesel fuels – language that industry is now suing over because it claims the agency must undergo a formal rulemaking to impose permitting requirements. That lawsuit, *Independent Petroleum Association of America (IPAA), et al. v. EPA,* is pending in the U.S. Court of Appeals for the District of Columbia Circuit and slated for oral arguments Nov. 14 over whether the website statements are considered final agency action and should be considered arbitrary and capricious.

EPA Seeks Clarification

But the guidance is EPA's attempt to provide clarifications for state regulators on how to write permit requirements that address the unique characteristics of fracking – making the definition of diesel fuels a core issue because it will establish parameters for determining whether an oil-and-gas operation must seek a permit.

“It is not surprising that EPA would seek to extend its reach into oil and natural gas production operations through the broad definition,” a second industry source says. “However, the fundamental issue remains that Congress used the term 'diesel fuel.' Diesel fuel is a product, not a 'collection of physical and chemical characteristics.'”

Industry and state regulators argued to EPA in stakeholder meetings earlier this year that “diesel fuel” refers to specific products linked to two specific CAS numbers, or, alternatively, that diesel fuels are already well defined in a regulatory context, including EPA's fuels and fuel additive standards. The latter definition identifies diesel fuels as "any fuel sold in any state of territory of the U.S. and suitable for use in diesel engines, and that is a distillate known as No.1 or No.2, a non-distillate fuel with comparable chemical and physical properties (bio diesel), or a mixture of fuels meeting the requirements of the above paragraphs."

But representatives of four EPA regions, the Energy Department and the Interior Department during a May 10 meeting voiced concern that a “narrow definition of diesel fuels could make it economical to design fracture fluid components that are hydrocarbon-based but fall outside of the permit requirement for hydraulic fracturing using diesel fuels," according to EPA's meeting summary.

The CAS numbers were the preferred approach for industry and states because they offer more “clarity and certainty,” the industry attorney says.

And the second industry source adds that OMB officials should consider while reviewing the guidance that CAS numbers could ease the ability of industry to comply with the regulations because they are more specific. “CAS numbers bring certainty that other approaches do not.”

But Codrington said during the Sept. 27 meeting that EPA found CAS numbers are not always good indicators of the physical characteristics of a substance.

The second source also identified a host of other issues with the guidance that industry is likely lobby OMB on, including the potential implications of EPA's proposed permitting scheme on the primacy process, since state regulators generally reject the notion that fracking can feasibly be regulated under Class II UIC rules, as EPA is proposing. “Similarly, the SDWA imposes restrictions on regulation associated with Class II wells if it unnecessarily inhibits oil and natural gas production; EPA has never addressed this issue in the materials it has generated so far,” that source says.

Meanwhile, one environmentalist says that while the exclusion for diesel fuels was created in 2005 specifically to address concerns by Democratic lawmakers that a study showed BTEX compounds in diesel could potentially exceeds drinking water limits, little data has been made public about actual instances of diesel use in fracking, making setting an effective definition difficult. “No one knows exactly where those diesel injections were.”

-- *Bridget DiCosmo* (bdicosmo@iwpnews.com This e-mail address is being protected from spambots. You need JavaScript enabled to view it)

http://insideepa.com/201110172379294/EPA-Daily-News/Daily-News/epa-faces-likely-industry-challenge-to-fracking-guides-diesel-definition/menu-id-95.html

Daily News

Despite Court Battle, DOJ Vows Strict Enforcement For Fracking Operations

Posted: October 14, 2011

The Justice Department's (DOJ) top environmental official is vowing to strictly enforce environmental laws against hydraulic fracturing operations even as the department is facing skepticism from a federal appellate court panel over what courts can consider when reviewing pre-enforcement actions.

“As hydraulic fracturing occurs with increasing frequency across the country, companies and individuals involved in those operations must adhere to the laws that protect human health and the environment and level the playing field for responsible businesses,” Assistant Attorney General Ignacia Moreno said in an Oct. 11 statement.

The Oct. 11 statement announced a criminal prosecution DOJ pursued on behalf of EPA against Integrated Production Services, a Houston-based oil and gas drilling contractor, for violating the Clean Water Act (CWA) while carrying out a fracking operation in Atoka County, OK.

According to the statement, the company Oct. 11 entered a guilty plea in U.S. District Court for the Eastern District of Oklahoma to a CWA violation, agreeing to a $140,000 fine and making a community service payment of $22,000 to the state's Department of Wildlife Conservation for studies and remediation of a creek located in eastern Oklahoma. In addition, the contractor must serve two years probation and implement an environmental compliance program, and one company supervisor faces up to one year in federal prison and a $100,000 fine for his part in the contamination.

EPA says the company's fracking operations used hydrochloric acid, commonly added to fracking fluid to help break up rock and dissolve minerals, and in 2007 a tank at the site leaked the acid onto the earthen perimeter of the well, which had flooded from heavy rains. The company supervisor then drove a truck through the earthen area, causing the rainwater and acid discharge to spill an estimated 400-700 gallons of hydrochloric acid into a tributary of Boggy Creek.

Agency officials said the case demonstrates EPA's commitment to holding oil and gas companies responsible to contamination associated with drilling, reiterating the agency's approach to oversee fracking through enforcement, since a 2005 energy law barred it from directly regulating the practice under the Safe Drinking Water Act (SDWA).

"We recognize the critical importance of developing domestic sources of energy responsibly, and will continue to vigorously prosecute illegal conduct," Moreno said.

Court Battle

But the vow to enforce comes even as government lawyers are struggling in federal court to make its case that enforcement orders issued under environmental statutes are not subject to pre-enforcement judicial review where the agency must prove an underlying statutory violation prior to a judge enforcing the order.

DOJ lawyers representing EPA recently walked back their stance that another Texas gas drilling company is not entitled to challenge the underlying allegations of an emergency SDWA enforcement order before a federal court can force the drillers to comply with the order and pay penalties, a stance that may make it difficult to easily enforce against drillers alleged to have violated the law.

In *Range Resources v. EPA*, the Texas drilling company is challenging EPA's Dec. 7, 2010 SDWA emergency order requiring the company to monitor and clean up alleged releases from its drilling operations. Range is suing EPA in the U.S. Court of Appeals for the 5th Circuit, alleging the order violates the company's due process rights because it is not afforded the opportunity to prove its drilling operations didn't cause or contribute to the contamination before having to comply with the remediation and pay stiff penalties.

During arguments in the lower court, a DOJ attorney argued on behalf of EPA that the only two issues which could be raised in that court were the amount of penalties Range should pay and whether it had complied with the order.

But more recently, DOJ's Brian Lynk argued for EPA during Oct. 3 oral arguments in the U.S. Court of Appeals for the 5th Circuit that a 1996 decision *United States of America et al. v. Marine Shale Processors*, ruled that injunctions like what EPA is seeking in *Range* give the judge considerable discretion in reviewing the circumstances behind the order.

Lawyers for Range highlighted the inconsistencies between EPA's recent statements to a federal appellate court and its earlier stance that a district court lacks discretionary authority to review

the circumstances underlying an emergency order the agency issued to the company. In a supplemental brief following oral arguments, attorneys for Range say that EPA's arguments are "at odds" with one another on whether the district court can review the underlying allegations that the drilling company violated SDWA before enforcing the order.

In an Oct. 11 supplemental brief, the agency's lawyers acknowledge that a court injunction to enforce the order is not "automatic." But the lawyers say the *Marine Shale* decision sets a wider area of issues the court has discretion to consider before issuing an injunction, saving the underlying state from a due process violation.

"EPA never argued that injunctive relief is 'automatic' if the district court finds that Range failed to comply with the order," EPA says in the Oct. 11 brief.

EPA says it did not include the *Marine Shale* suit in its district court briefs because Range's initial arguments were more focused on the penalties than on the actual injunction. "Accordingly, at oral argument, EPA brought *Marine Shale* to the Court's attention and fully explained EPA's position on the injunctive relief issue." – *Bridget DiCosmo*

http://insideepa.com/201110142379244/EPA-Daily-News/Daily-News/despite-court-battle-doj-vows-strict-enforcement-for-fracking-operations/menu-id-95.html

Daily News

Industry Criticizes Deadlines, Feasibility Of EPA Fracking Well Air Rules

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Oil and gas industry groups are criticizing what they see as EPA's too-short compliance deadline for its first-time rules limiting emissions from hydraulic fracturing wells and revised rules for other oil and gas drilling, saying companies need more time to comply in order to build the emissions controls necessary to meet the rules' requirements.

Gas transmission industry officials are separately complaining about their inclusion in the rules, saying that EPA's proposed restrictions on pipelines' air toxics emissions are a cover for imposing greenhouse gas (GHG) limits on transmission infrastructure by requiring the plugging of leaks of the GHG methane from pipelines.

Environmentalists, meanwhile, are criticizing EPA's decision not to regulate emissions of methane as part of its proposed new source performance standards (NSPS) for the drilling sector. The NSPS would set limits on volatile organic compounds (VOCs) and sulfur dioxide, and air toxics for both gas production and transmission and storage. The proposal, which revises the 1985 NSPS and 1999 air toxics standards, would regulate fracking wells for the first time.

Activists claim that fracking, under which chemicals, liquids, sand and other substances are injected into wells to extract gas from shale, results in harmful emissions of various gases. EPA

says its rules should reduce drilling VOCs by 95 percent, while methane and air toxics emissions would fall by 26 and 30 percent, respectively.

At three recent public hearings on the rule -- in Pittsburgh, Denver and Arlington, TX -- industry officials said they generally support EPA's proposal to require "green completion" at fracking wells, a process pioneered in Western gas fields that traps gases escaping from new wells. That gas can then be processed and sold at a profit. But industry officials also question the feasibility of the proposal and time allowed for compliance.

The American Petroleum Institute (API) at the Sept. 27 Pittsburgh hearing said, "We support green completions where the operators determine the technology to be safe, technically feasible and cost-effective. However, the final rules should phase-in any green completion requirements by including a significant extension of time for their full implementation."

API warns that a number of technical hurdles can hamper the ability to conduct green completions, such as "certain coal bed methane technologies, low pressure reservoirs, and reservoirs with very low volatile organic compound content." Also, thousands of "tank combustors" will need to be built and certified to reduce emissions," API says, and these will not be available by EPA's projected date for adopting a final rule of Feb. 28, 2012.

At the Sept. 28 hearing in Denver, the Western Energy Alliance said the 60-day comment period for the new rules is inadequate "as it does not allow time for deliberative public comment" of the complex rules.

The group suggests that EPA ask the U.S. Court of Appeals for the District of Columbia Circuit to extend the comment period, which would be necessary as the proposal was issued pursuant to a schedule established by a February 2010 consent decree between WildEarth Guardians and EPA.

'Elements Missing'

The alliance also says EPA's cost estimates for enforcement of the rule are too low because of "elements missing from the analysis," such as the cost of piping and other equipment necessary to allow flaring of excess gas that cannot be trapped by green completion. Further, the group says the agency's estimates of the rules' benefits are too high, as "EPA is assuming only a small percentage of facilities currently capture gas, and takes credit for the full economic benefit of something many companies are already doing where the operational conditions allow."

The Marcellus Shale Coalition made similar comments in its testimony at the Sept. 27 hearing in Pittsburgh. The coalition said that the northern Marcellus shale in Pennsylvania contains "dry gas," which "would dramatically increase the cost per ton reduction when evaluating the feasibility of reduced emissions completions, vapor recovery units, flares, optical imaging leak detection and repair programs, as well as others."

When EPA released its proposal July 28, some environmentalist sources welcomed the green completion option as environmentally beneficial, and something industry could accept, since the

captured fugitive gas can be sold for a profit. Although environmentalists had hoped for direct controls on methane, which is a more potent GHG than carbon dioxide, EPA opted not to include such controls in the rules, merely citing significant reductions in methane emissions that are a "co-benefit" of VOC controls, and saying that the agency will continue to evaluate potential direct controls.

Sierra Club in Sept. 27 testimony in Pittsburgh criticized that move and said, "EPA needs to do everything it can to control greenhouse gases from these sources, and so should require methane controls at new *and* existing sources."

The group also complains that the rules only partially cover emissions from new natural gas compressor stations, and do not cover existing compressors. Sierra Club further dislikes the option of flaring gas, which would be mandated under the rule in situations where collection of escaping gases is impractical or dangerous.

"Flares are themselves air pollution sources, so EPA should carefully limit their use," the group says. Further, the rules do not restrict emissions of hydrogen sulfide, a pollutant associated with both oil and gas drilling and concentrated animal feeding operations.

INGAA's Concerns

Meanwhile, in comments filed with EPA Oct. 11, the Interstate Natural Gas Association of America (INGAA), which represents interstate gas pipeline operators, says EPA is using VOC standards for oil and gas transmission as a ruse for GHG regulation. “These rules would have far-reaching impacts on our industry, yet, for natural gas transmission and storage companies, VOC emissions are relatively minimal. This leads us to believe that the actual aim of these proposed standards is to regulate greenhouse gases,” INGAA says.

INGAA says that although VOC emissions from pipelines are minimal, EPA's proposal would impose serious costs on the industry because it requires that leaks of gases, notably methane, be plugged.

The industry already has “powerful commercial incentives to avoid losses in transit,” INGAA says, making EPA's controls unnecessary. INGAA says the capital costs of compliance are significant, but are outweighed by even more costly monitoring and reporting requirements in the proposal.

“Using VOC regulations as a foil for regulating greenhouse gases is premature as a matter of policy, unfounded as a matter of law, inconsistent with prevailing regulatory policy and contrary to the country's immediate energy and environmental interests,” the comments add. INGAA says EPA has insufficient data to begin regulating methane escaping from pipelines, and that the consent decree with environmentalists which spurred the proposal requires sulfur dioxide and VOC controls, not controls on methane.

Further, imposing the regulation on transmission and storage infrastructure, rather than only drilling, contravenes President Obama' Executive Order 13563, which requires that federal agencies adopt regulations that show benefits clearly outweighing costs, and that impose the least burden on society, INGAA says. -- *Stuart Parker* (

sparker@iwpnews.com This e-mail address is being protected from spambots. You need JavaScript enabled to view it)

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